

Title (en)
Rotating membrane filter disc apparatus

Title (de)
Rotationsmembranfiltervorrichtung

Title (fr)
Appareil de filtration a membrane rotatif

Publication
EP 2612701 B1 20170222 (EN)

Application
EP 12000117 A 20120109

Priority
EP 12000117 A 20120109

Abstract (en)
[origin: EP2612701A1] A filtration apparatus (2), comprising a pressurised cylindrical pressure vessel (4) having a longitudinal axis (X); a shaft (8) having a longitudinal axis (Y) extending parallel to the longitudinal axis (X) of the pressure vessel (4); a plurality of rotatable membrane filter discs (6) arranged along the length of the shaft (8). The membrane filter discs (6) are spaced from each other attached to the shaft (8) and oriented transverse to the longitudinal axis (Y) of the shaft (8). The interior (10) of the membrane filter discs (6) are in fluid communication with a permeate discharge channel (12) extending parallel to the longitudinal axis (X) of the pressure vessel (4). The pressure vessel (4) has a cylindrical inner geometry without any significant obstruction elements. The longitudinal axis (X) of the pressure vessel (4) is laterally offset from the longitudinal axis (Y) of the shaft (8) and/or the membrane filter discs (6) are oval-shaped.

IPC 8 full level
B01D 63/16 (2006.01); **B01D 33/21** (2006.01); **C02F 3/12** (2006.01)

CPC (source: EP US)
B01D 33/21 (2013.01 - EP US); **B01D 33/39** (2013.01 - EP US); **B01D 63/16** (2013.01 - EP US); **C02F 3/02** (2013.01 - US); **C02F 3/1268** (2013.01 - EP US); **B01D 2201/602** (2013.01 - EP US); **B01D 2313/2011** (2022.08 - EP US); **B01D 2313/26** (2013.01 - EP US); **B01D 2315/02** (2013.01 - EP US); **Y02W 10/10** (2015.05 - EP US)

Cited by
WO2019129730A1; CN110759462A; LU102293B1; LU100597B1; WO2023073078A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
EP 2612701 A1 20130710; EP 2612701 B1 20170222; CN 103191644 A 20130710; CN 103191644 B 20170606; US 2013175208 A1 20130711

DOCDB simple family (application)
EP 12000117 A 20120109; CN 201310008689 A 20130109; US 201313736355 A 20130108